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FIRST NAMED INVENTOR APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. TAO TAO 17634-00034U 09/459,062 12/10/1999 9639 **EXAMINER** 5318 7590 09/27/2006 NATIONAL INSTITUTES OF HEALTH CHEN, STACY BROWN OFFICE OF TECHNOLOGY TRANSFER ART UNIT PAPER NUMBER 6011 EXECUTIVE BLVD SUITE 325 ROCKVILLE, MD 20852-3804 1648

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
09/459,062	TAO ET AL.	
Examiner	Art Unit	
Stacy B. Chen	1648	

		Stacy B. Offeri	1040	
	The MAILING DATE of this communication appe	ars on the cover sheet with the	correspondence add	ress
THE	REPLY FILED <u>18 August 2006</u> FAILS TO PLACE THIS A	PPLICATION IN CONDITION FOR	ALLOWANCE.	
1. 🛚	The reply was filed after a final rejection, but prior to or or this application, applicant must timely file one of the follown places the application in condition for allowance; (2) a Nota Request for Continued Examination (RCE) in compliant time periods:	n the same day as filing a Notice of wing replies: (1) an amendment, af otice of Appeal (with appeal fee) in ce with 37 CFR 1.114. The reply m	Appeal. To avoid aba fidavit, or other evider compliance with 37 Ci	nce, which FR 41.31; or (3)
a)	\square The period for reply expires $\underline{4}$ months from the mailing date			
b)	no event, however, will the statutory period for reply expire I Examiner Note: If box 1 is checked, check either box (a) or	ater than SIX MONTHS from the mailin (b). ONLY CHECK BOX (b) WHEN TH	g date of the final rejecti	on.
	TWO MONTHS OF THE FINAL REJECTION. See MPEP 7		100(-) 4	
have lunder set fo may r	sions of time may be obtained under 37 CFR 1.136(a). The date been filed is the date for purposes of determining the period of ex 37 CFR 1.17(a) is calculated from: (1) the expiration date of the ith in (b) above, if checked. Any reply received by the Office late educe any earned patent term adjustment. See 37 CFR 1.704(b) CE OF APPEAL.	tension and the corresponding amount shortened statutory period for reply orig r than three months after the mailing da	of the fee. The appropri inally set in the final Offi	iate extension fee ce action; or (2) as
	The Notice of Appeal was filed on A brief in comp	pliance with 37 CFR 41.37 must be	filed within two month	ns of the date of
	filing the Notice of Appeal (37 CFR 41.37(a)), or any external Notice of Appeal has been filed, any reply must be filed NDMENTS	nsion thereof (37 CFR 41.37(e)), to	o avoid dismissal of th	e appeal. Since
		but ariar to the data of filing a brief	will not be entered b	ocause
J	The proposed amendment(s) filed after a final rejection, (a) They raise new issues that would require further co			ecause
	(b) They raise the issue of new matter (see NOTE below			
	(c) They are not deemed to place the application in be appeal; and/or			the issues for
	(d) They present additional claims without canceling a		jected claims.	
	NOTE: (See 37 CFR 1.116 and 41.33(a)).			(TTO) 00 ()
	The amendments are not in compliance with 37 CFR 1.1 Applicant's reply has overcome the following rejection(s)		ompliant Amendment	(PTOL-324).
	Newly proposed or amended claim(s) would be a		timely filed amendme	ent canceling the
- 12	non-allowable claim(s).	□ will not be entered or b) ☑ w	ill be entered and an	volunation of
/.⊠	For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is pro The status of the claim(s) is (or will be) as follows:		iii be entereu and an t	explanation of
	Claim(s) allowed:			
	Claim(s) objected to:			
	Claim(s) rejected: <u>1-10, 12, 14, 15, 17, 19-30 and 46-74</u>	•		
ΔEFI	Claim(s) withdrawn from consideration: <u>31-45</u> . DAVIT OR OTHER EVIDENCE			
	The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).	ut before or on the date of filing a N Id sufficient reasons why the affida	lotice of Appeal will <u>no</u> vit or other evidence is	ot be entered s necessary and
9. 🗆	The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to showing a good and sufficient reasons why it is necessar	overcome all rejections under appe	al and/or appellant fa	ils to provide a
	The affidavit or other evidence is entered. An explanation			
	UEST FOR RECONSIDERATION/OTHER The request for reconsideration has been considered by	t does NOT place the application i	n condition for allows	nce because:
т. ц	. The request for reconsideration has been considered but	at does NOT place the application i	II COllulion for allowa	nce because.
	Note the attached Information Disclosure Statement(s). Other:	(PTO/SB/08) Paper No(s).		

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Advisory Action

Applicant's after-final amendment filed August 18, 2006 is acknowledged and entered. Claims 1-10, 12, 14, 15, 17, 19-30 and 46-74 are pending and under examination. Claims 31-45 remain withdrawn from consideration, being drawn to non-elected subject matter.

The rejection of claims 11, 13 and 16-18 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, is <u>moot</u> in view of the cancellation of claims 11, 13 and 16-18.

Claims 26 and 71 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, is <u>withdrawn</u> in view of Applicant's persuasive arguments.

The provisional rejection of claims 1-30 and 46-74 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 144-215 of copending Application No. 09/083,793, is <u>withdrawn</u> in view of the terminal disclaimer filed August 18, 2006.

The provisional rejection of claims 1-30 and 46-74 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 53-85 of copending Application No. 09/458,813, is withdrawn in view of the terminal disclaimer filed August 18, 2006.

The provisional rejection of claims 1-30 and 46-74 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 85, 88-92, 94-96, 98, 99, 101, 104, 107, 108, 113-117, 119, 122-126, 128-130, 132, 133, 135, 140, 141, 146-152, 154,

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157, 159, 162 and 164 of copending Application No. 09/586,479, is <u>withdrawn</u> in view of the terminal disclaimer filed August 18, 2006.

The provisional rejection of claims 1-30 and 46-74 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 180-222 of copending Application No. 09/733,692, is <u>withdrawn</u> in view of the terminal disclaimer filed August 18, 2006.

Claim Rejections - 35 USC § 102

Claims 1-10, 12, 14, 15, 17, 19-30 and 46-74 remain rejected under 35 U.S.C. 102(e) as being anticipated by Belshe *et al.* (US 5,869,036, "Belshe"). The summary of claims and teachings of Belshe are of record.

The claims are directed to infectious chimeric PIVs having a human PIV background genome and a chimeric glycoprotein from another antigenically distinct HPIV. The claims indicate that a structural domain, antigenic domain or epitope of the heterologous gene (or encoded protein) is incorporated into the background genome. The Office recognizes that Applicant is interpreting the "chimeric glycoprotein" as a glycoprotein that has a portion of the background gene and a portion of the heterologous gene, but that neither the background gene or the heterologous gene is completely present in the chimeric gene encoding the chimeric glycoprotein. This inventive concept is not represented clearly in the claims. The problem remains that the claims are broadly written and thus read on Belshe's invention for two reasons:

1. Belshe's cp45 HPIV-3 hybrid virus has a HPIV-3 background genome and a glycoprotein from HPIV-2. The final product (a glycoprotein from HPIV-2 completely replaced

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with the corresponding glycoprotein from HPIV-3) is reasonably considered a "chimeric" glycoprotein. The glycoprotein from HPIV-2 is chimeric to the background HPIV-3 genome.

2. Given the interpretation discussed above, the claims' recitation of "incorporating one or more heterologous structural domains, antigenic domains" of a second antigenically distinct HPIV read on Belshe's glycoprotein exchange between cp45 HPIV-3 and HPIV-1 or 2. (Note that the exchange of single epitopes between HPIVs is not taught or suggested by Belshe.)

It is suggested that the identity of the "chimeric glycoprotein" be structurally defined in the claim in order to overcome this rejection.

With regard to Applicant's remarks on "antigenically distinct", the Office understands that Applicant appears to interpret the term as follows: Any antibody that binds to any epitope along and within the entirety of any wild-type HPIV-1 will never bind to any epitope along and within the entirety of any wild-type HPIV-2 or HPIV-3. The same applies to HPIV-2 in relation to HPIV-1 and HPIV-3; the same applies to HPIV-3 in relation to HPIV-1 and HPIV-2. While this understanding would clear up the scope of "antigenically distinct", the specification does not appear to support this interpretation, nor would Applicant be able to prove such a concept. It is suggested that Applicant specifically name the antigenically distinct HPIVs, in a Markush group, for example, in order to clarify the scope of the term "antigenically distinct".

Conclusion

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy B. Chen whose telephone number is 571-272-0896. The examiner can normally be reached on M-F (7:00-4:30). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

STACY B. CHEN
PRIMARY EXAMINER